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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/280,541	03/30/1999	JAE-ICK HO	P55657	5957

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EXAMINER
NGUYEN, KEVIN M

ART UNIT	PAPER NUMBER
2674	

DATE MAILED: 05/13/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/280,541	HO, JAE-ICK	
	Examiner	Art Unit	
	Kevin M. Nguyen	2674	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *18 January 2002* .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-20* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) *5 and 17* is/are allowed.

6)☒ Claim(s) *1-4 ,6, 10-16 and 18* is/are rejected.

7)☒ Claim(s) *7-9,19 and 20* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

1. The amendment filed on 1/18/2002 is entered. The rejections of claims 1-4, 6, 10-16 and 18 are maintained.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 1, 3, 12 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stoddard et al (US 3,665,454) in view of Metlitsky et al (US 5,545,886).

As to claims 1 and 12, Stoddard et al teaches an apparatus and a method which include an input device 12 inputting a display data channel D1, D2, a computer 10 controls the input device 12 with a predetermined electrical signal via the data bus (a driving device driving the inputting device with a predetermined electric signal as claimed, see figure 1). The updating data is coupled via an interface unit 11 to computer 10 where it is processed according to the stored program to update the instruction set (an interfacing section indicating whether the display data channel of the monitor is inputted into the computer and outputting the same voltage signal as an initial signal, the outputted voltage signal is switched a different time according to a result of inputting the display data channel as claimed, see col. 2, lines 71-73). Therefore, Stoddard et al teaches all of the claimed limitation of claim 1, except for "determining whether or not

the result of inputting the display data channel is correct." However, Metlitsky et al teaches a microprocessor 20 detecting a correction data signal34 on line 17; if the code is valid reading is possible, if not then a false reading is at least avoided and another shot by the user (figure 1 and 3, col. 5, lines 2-8). It would have been obvious to a person of ordinary skill in the art at the time of the invention to incorporate the barcode scanner taught by Metlitsky et al for the computer of Stoddard et al's system because the computer 10 communicating with various input device (see col. 2, lines 40-41 of Stoddard et al).

As to claims 3 and 14, Metslisky et al teaches a handheld scanner 35 (figure 5).

4. Claims 4 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stoddard et al in view of Metlitsky et al as applied to claim 1 above, and further in view of Cruiskshank et al (US 5,109,503).

As to claims 4 and 15, Stoddard et al and Metlitsky et al teach all of the claimed limitations of claim 1, except for the controller for the controlling and determining includes a programmable logic controller. However, Cruickshank et al teaches a programmable logic controller (PLC) 37 and input device 35 which combine into a personal computer (figure 2, col. 4, lines 58-60). It would have been obvious to a person of ordinary skill in the art at the time of the invention to incorporate additional PLC 75 taught by Cruiskshank et al for the computer of Stoddard et al's and Metlitsky et al's system because PLC 37 and input device 35 might take the form of various operator interface devices for simply inputting user parameters and counter configuration selection (col. 4, lines 63-66 of Cruiskshank et al).

5. Claims 2, 6, 13 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stoddard et al in view of Metlitsky et al as applied to claims 1 and 12 above, and further in view of Keiji (US 5,115,227).

As to claims 2, 6, 13 and 18, Stoddard et al and Metlitsky et al teach all of the claimed limitation of claims 1 and 12, except for a switch to select one of the mouse and the scanner. However, Keiji teaches the switch 43 to select one of the mouse 48 and the scanner 49 (see fig. 5). It would have been obvious to a person of ordinary skill in the art at the time of the invention to incorporate the additional computer mouse taught by Keiji in the apparatus of Stoddard et al's and Metlitsky et al's system because this would allow a user to utilize the mouse to control a cursor to select a cursor faster.

6. Claims 10 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stoddard et al in view of Metlitsky et al, and further in view of Kelly (US 5,065,360).

As to claims 10 and 11, Stoddard et al and Metlitsky et al teach an apparatus and a method which include an input device 12 inputting a display data channel D1, D2, a computer 10 controls the input device 12 with a predetermined electrical signal via the data bus (a driving device driving the inputting device with a predetermined electric signal as claimed, see figure 1). The updating data is coupled via an interface unit 11 to computer 10 where it is processed according to the stored program to update the instruction set (an interfacing section indicating whether the display data channel of the monitor is inputted into the computer and outputting the same voltage signal as an initial signal, the outputted voltage signal is switched a different time according to a result of

inputting the display data channel as claimed, see col. 2, lines 71-73). Stoddard et al fails to teach "determining whether or not the result of inputting the display data channel is correct." However, Metlitsky et al teaches a microprocessor 20 detecting a correction data signal34 on line 17; if the code is valid reading is possible, if not then a false reading is at least avoided and another shot by the user (figure 1 and 3, col. 5, lines 2-8). It would have been obvious to a person of ordinary skill in the art at the time of the invention to incorporate the barcode scanner taught by Metlitsky et al for the computer of Stoddard et al's system because the computer 10 communicating with various input device (see col. 2, lines 40-41 of Stoddard et al).

Therefore, Staddard et al and Metlitsky et al teach all of the claimed limitations of claim 10, except for a relay switch connecting in parallel to a contact point for inputting the display data channel of the inputting device. However, Kelly teaches a relay switches 70 and 72 connecting in parallel to a data wire for inputting and outputting to destination computer (see figure 7A and 7B). It would have been obvious to a person of ordinary skill in the art at the time of the invention to incorporate the additional relay switches 70 and 72 taught by Kelly for contacting the input device of Staddard et al's and Metlitsky et al's system because this would provide complete isolation of elements 28-38 from any transient voltage conditions when the elements are bypassed as shown in Fig. 7B (col. 11, lines 12-14 of Kelly).

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

8. Claims 1 and 12 are rejected under 35 U.S.C. 102(e) as being unpatentable over Bunte et al (US 6,034,379).

As to claims 1 and 12, Bunte et al teaches an apparatus and a method which include a barcode reader 1815 (see figure 19a) inputting a display data into the display 1883 via a display driver 1885, a control and driver circuit 1853 driving the barcode reader 1815 (a driving device as claimed), the printed circuit board 1812 has a microprocessor 1873 operating as a central processing unit (CPU) for the code reader (an interface circuit as claimed, see figure 18B, col. 24, lines 48-50), the control element 1811 controls a barcode reader. If the use of that illuminator fails to yield a valid read, the code reader selects a second of the available illuminators and reattempts the read. Again, upon failure to obtain a valid read, the coder reader selects yet another illuminator options have been exhausted (see abstract).

9. Claims 2, 6, 13 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bunte et al in view of Keiji.

As to claims 2, 6, 13 and 18, Bunte et al teaches all of the claimed limitation of claims 1 and 12, except for a switch to select one of the mouse and the scanner. However, Keiji teaches the switch 43 to select one of the mouse 48 and the scanner 49 (see fig. 5). It would have been obvious to a person of ordinary skill in the art at the time of the invention to incorporate the additional computer mouse taught by Keiji in the apparatus of Bunte et al's system because this would allow a user to utilize the mouse to control a cursor to select a cursor faster.

10. Claims 4 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bunte et al in view of Cruiskshank et al.

As to claims 4 and 15, Bunte et al teach all of the claimed limitations of claims 1 and 12, except for the controller for the controlling and determining includes a programmable logic controller. However, Cruickshank et al teaches a programmable logic controller (PLC) 37 and input device 35 which combine into a personal computer (figure 2, col. 4, lines 58-60). It would have been obvious to a person of ordinary skill in the art at the time of the invention to incorporate additional PLC 75 taught by Cruiskshank et al for the computer of Bunte et al's system because PLC 37 and input device 35 might take the form of various operator interface devices for simply inputting user parameters and counter configuration selection (col. 4, lines 63-66 of Cruiskshank et al).

11. Claims 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bunte et al in view of Cruiskshank et al as applied to claims 15 and 12 above, and further in view of Kelly.

As to claim 16, Bunte et al and Cruiskshank et al teach all of the claimed limitations of claims 15 and 12, except for a relay coil of a driving device and turns-on a relay switch of a driving device to input a display data channel to a monitor. However, Kelly teaches a relay switches 70 and 72 connecting in parallel to a data wire for inputting and outputting to destination computer (see figure 7A and 7B). It would have been obvious to a person of ordinary skill in the art at the time of the invention to incorporate the additional relay switches 70 and 72 taught by Kelly for contacting the input device of Bunte et al's and Cruiskshank et al's system because this would provide complete isolation of elements 28-38 from any transient voltage conditions when the elements are bypassed as shown in Fig. 7B (col. 11, lines 12-14 of Kelly).

12. Claims 10 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bunte et al in view of Kelly.

As to claims 10 and 11, Bunte et al teach an apparatus and a method which include a barcode reader 1815 (see figure 19a) inputting a display data into the display 1883 via a display driver 1885, a control and driver circuit 1853 driving the barcode reader 1815 (a driving device as claimed), the printed circuit board 1812 has a microprocessor 1873 operating as a central processing unit (CPU) for the code reader (an interface circuit as claimed, see figure 18B, col. 24, lines 48-50), the control element 1811 controls a barcode reader. If the use of that illuminator fails to yield a valid read, the code reader selects a second of the available illuminators and reattempts the read. Again, upon failure to obtain a valid read, the coder reader selects yet another illuminator options have been exhausted (see abstract).

Therefore, Bunte et al teaches all of the claimed limitations of claim 10, except for a relay switch connecting in parallel to a contact point for inputting the display data channel of the inputting device. However, Kelly teaches a relay switches 70 and 72 connecting in parallel to a data wire for inputting and outputting to destination computer (see figure 7A and 7B). It would have been obvious to a person of ordinary skill in the art at the time of the invention to incorporate the additional relay switches 70 and 72 taught by Kelly for contacting the input device of Bunte et al's system because this would provide complete isolation of elements 28-38 from any transient voltage conditions when the elements are bypassed as shown in Fig. 7B (col. 11, lines 12-14 of Kelly).

13. Claims 7-9, 19 and 20 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims

14. Claims 5 and 17 are allowed.

Response to Arguments

15. Applicant's arguments filed 1/18/2002 have been fully considered but they are not persuasive.

16. Applicant's arguments with respect to claims 1-4, 6, 10-16 and 18 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

17. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Kevin M. Nguyen** whose telephone number is **703-305-**

6209. The examiner can normally be reached on MON-FRI from 9:00-5:00 with alternate Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Richard A Hjerpe** can be reached on **703-305-4709**.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to:

(703) 872-9314 (for Technology Center 2600 only)

Hand-delivered response should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

Kevin M. Nguyen
Examiner
Art Unit 2674

RICHARD HJERPE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600